Executive Summary

Montana State University (MSU) is a research-intensive land grant university. The university encompasses four campuses located in Bozeman, Billings, Great Falls, and Havre.

In a March 3, 2006 article in *The Chronicle of Higher Education,* MSU-Bozeman was designated as a university with "very high research activity" based on a study conducted by the Carnegie Foundation for Advancement of Teaching. This designation is the highest distinction granted by the Carnegie Foundation and places MSU-Bozeman in the top two percent of the country's institutions in terms of research. During fiscal year 2005, the MSU-Bozeman Research, Creativity and Technology Transfer office administered grant and contract sponsored research totaling $98 million. The Billings campus also performs research activity, although not to the same degree as the Bozeman campus. The Billings campus currently is administering $600,000 in grant and contract funds used for sponsored research. MSU-Northern and MSU College of Technology-Great Falls campuses receive grant and contract monies; however, these campuses do not perform research.

Grant and contract funds support research activities resulting in the collection of data. The processes used to create research data are unique and the data created is often irreplaceable if lost or corrupted. Each campus is responsible for securing research data resulting from grant and contract sponsored activity. Universities are susceptible for computer intrusion attempts, because they have high-speed networks, vast amounts of storage, and a more open approach to sharing information because of their research mission. For this reason, it is important to provide security measures to protect the integrity and the intellectual and monetary value of research data, as well as the university's reputation as a research school. The scope of this audit is limited to the security of electronic research data at MSU-Bozeman and MSU-Billings.

We evaluated the electronic research data control environment using Board of Regents policy, university policy and procedures, data security practices implemented at similar universities, and generally

applicable and accepted information technology standards established by the IT Governance Institute. Audit work was conducted on both the Bozeman and Billings campuses.

On the Billings campus, approximately $600,000 in grant and contract funds are used by nine Principal Investigators (research project managers) to conduct sponsored research. During the course of our audit, we identified issues regarding physical access, user access control procedures, existence of a built-in account, and user workstation update practices. We believe these issues warrant management attention; however, these issues are not included in the report, but were discussed with MSU-Billings management. Upon our notification of these issues, MSU-Billings immediately addressed our concerns.

Principal Investigators on the MSU-Bozeman campus represented they applied some level of protection to secure research data. However, Principal Investigators have not been provided guidance to define the required level of data security. Research activity on the MSU-Bozeman campus has earned the university recognition as a top ranking research institution and research activity on the campus is expected to exceed $100 million this year. Given the importance of research to MSU-Bozeman, more emphasis could be placed on the security of electronic research data.